

Appl. No. 10/748,108  
Amdt. Dated September 14, 2005  
Reply to Office Action of June 14, 2005

Attorney Docket No. 81784.0298  
Customer No.: 26021

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended): An integrated circuit for an optical encoder, comprising:

a signal processing section for generating a position detection signal from a detection signal of a light receiving element;

a belt-like power source potential layer formed at least between the signal processing section and the light receiving element, electrical potential of the power source potential layer being pulled up set to power source potential level; and

a plurality of conductive layers formed at different heights at locations higher than above the power source potential layer,

wherein, in a region immediately above the power source potential layer, a connection line which intersects the power source potential layer above the power source potential layer for electrically connecting the light receiving element and the signal processing section is formed by a conductive layer among one of the plurality of conductive layers other than the lowermost layer, in a region immediately above the power source potential layer; and

wherein the width of the power source potential layer in the region where the power source potential layer is overlapped by the connection line is smaller than the width of the power source potential layer in the remaining region.

2. (Cancelled)

3. (Currently Amended): An integrated circuit for an optical encoder, comprising:

a group of lower conductive layers including a lower conductive layer connected to each of light receiving elements belonging to a first group of light receiving elements and a lower conductive layer connected to each of light receiving elements belonging to a second group of light receiving elements, the lower conductive layers being alternately disposed in parallel to each other and being first conductive layers;

two upper conductive layers disposed in parallel to each other at locations higher than above the lower conductive layers, and which are provided corresponding to the two groups of light receiving elements, respectively, each upper conductive layer including a first region extending in the direction intersecting the extending direction of the lower conductive layers and a second region extending along the extending direction of the lower conductive layers, the upper conductive layers being second conductive layers;

a plurality of through holes connecting the lower conductive layers corresponding to each group of light receiving elements with the corresponding first region of the upper conductive layer; and

a power source potential layer provided in an even lower place than the lower conductive layers, the power source potential layer extending in the direction which intersects the extending direction of the lower conductive layers and crossing the second region of the upper conductive layer under the section region of the upper conductive layer, without crossing the lower conductive layers.;

wherein the width of the power source potential layer in the portion crossing the second region of the upper conductive layer under the second region of

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the upper conductive layer is smaller than the width of the power source potential layer in the remaining portion.

4. (Cancelled)